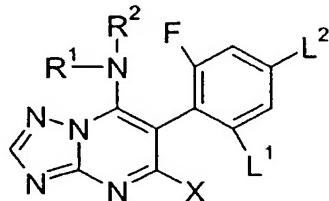


We claim:

1. A 6-phenyltriazolopyrimidine of the formula I



5 in which the substituents are as defined below:

R¹ is C₄-C₈-alkyl, C₄-C₈-haloalkyl, C₃-C₆-cycloalkyl substituted by at least one group R^a, C₃-C₈-halocycloalkyl, C₃-C₆-cycloalkyl-C₁-C₄-alkyl, C₅-C₈-alkenyl, C₂-C₈-haloalkenyl, C₃-C₆-cycloalkenyl, C₃-C₆-halocycloalkenyl, C₂-C₈-alkynyl, C₂-C₈-haloalkynyl or phenyl, naphthyl, or a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S,

10

R² is hydrogen, C₁-C₃-alkyl or one of the groups mentioned under R¹,

15

R¹ and R² together with the nitrogen atom to which they are attached may also form a five- to eight-membered saturated or partially unsaturated heterocycl or a five- or six-membered heteroaryl which is attached via N and may contain one to three further heteroatoms from the group consisting of O, N and S as ring member and/or may carry one or more substituents from the group consisting of halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₂-C₆-alkenyl, C₂-C₆-haloalkenyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₃-C₆-alkenyloxy, C₃-C₆-haloalkenyloxy, (exo)-C₁-C₆-alkylene and oxy-C₁-C₃-alkyleneoxy,

20

25 except piperidin-1-yl, which is unsubstituted or substituted by one or more methyl groups;

R¹ and/or R² may carry one to four identical or different groups R^a:

30

R^a is halogen, cyano, nitro, hydroxyl, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkylcarbonyl, C₃-C₆-cycloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₆-alkoxycarbonyl, C₁-C₆-alkylthio, C₁-C₆-alkylamino, di-C₁-C₆-alkylamino, C₂-C₈-alkenyl, C₂-C₈-haloalkenyl, C₂-C₆-alkenyloxy, C₂-C₈-alkynyl, C₂-C₈-haloalkynyl, C₃-C₆-alkynyloxy, oxy-C₁-C₃-alkyleneoxy, C₃-C₈-cycloalkenyl, phenyl, naphthyl, a five- or six-

35

membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S, where these aliphatic, alicyclic or aromatic groups for their part may be partially or fully halogenated;

5

L^1 is chlorine or fluorine;

L^2 is hydrogen,
is, if L^1 is fluorine, also fluorine;

10

X is C₁-C₄-alkyl

2. The compound of the formula I according to claim 1, in which L^1 and L^2 are fluorine.

15

3. The compound of the formula I according to claim 1, in which L^1 is fluorine and L^2 is hydrogen.

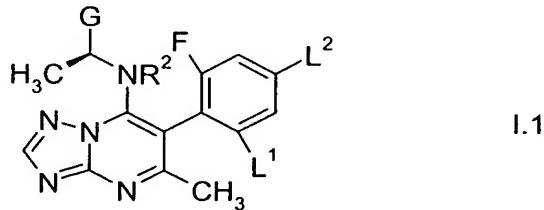
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4. The compound of the formula I according to claim 1, in which L^1 is chlorine.

5. The compound of the formula I according to any of claims 1 to 4, in which R¹ and R² together form a pyrrolidine ring which may carry one to four identical or different groups R^a.

25

6. A compound of the formula I.1:



I.1

in which

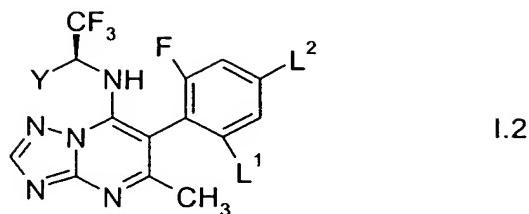
G is C₂-C₆-alkyl, C₁-C₄-alkoxymethyl or C₃-C₆-cycloalkyl;

30

R² is hydrogen or methyl; and

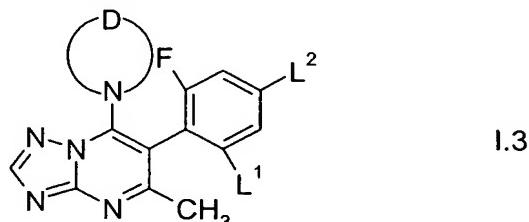
L¹ and L² are as defined in any of claims 1 to 4.

7. A compound of the formula I.2,



in which Y is C₂-C₆-alkyl and L¹ and L² are as defined in any of claims 1 to 4.

8. A compound of the formula I.3,



5

in which

- D together with the nitrogen atom forms a five- or six-membered saturated or partially unsaturated heterocycl or heteroaryl which is attached via N and may contain a further heteroatom from the group consisting of O, N and S as ring member and/or may carry one or more substituents from the group consisting of halogen, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₂-C₆-alkenyl, C₂-C₆-haloalkenyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₃-C₆-alkenyloxy, C₃-C₆-haloalkenyloxy, (exo)-C₁-C₆-alkylene and oxy-C₁-C₃-alkyleneoxy;
- 10 except piperidin-1-yl, which is unsubstituted or substituted by one or more methyl groups;
- 15

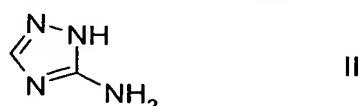
L¹ and L² are as defined in any of claims 1 to 4.

20

9. The compound of the formula I according to claim 1, in which the variables are as defined below:
 L¹,L² are fluorine, L³ is hydrogen; X is methyl; and
 L¹,L² are chlorine, L³ is hydrogen; X is methyl.

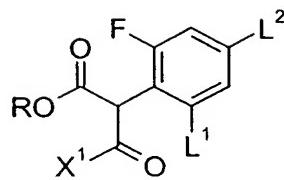
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10. A process for preparing the compound of the formula I according to any of claims 1 to 4, by reacting 5-amino1,2,4-triazole of the formula II

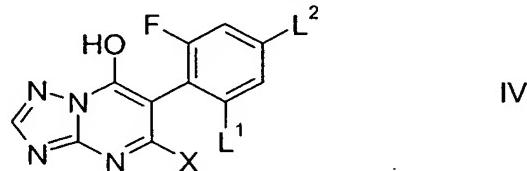


with a keto ester of the formula III

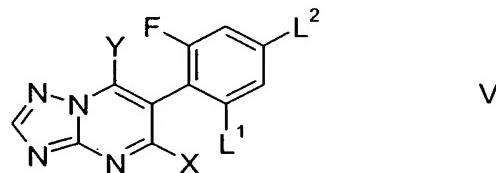
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in which R is C₁-C₄-alkyl to give a 7-hydroxytriazolopyrimidine of the formula IV,



which is, using a halogenating agent, converted into the corresponding
5
7-halotriazolopyrimidine of the formula V



and compound V is reacted with an amine of the formula VI



to give the compound of the formula I.

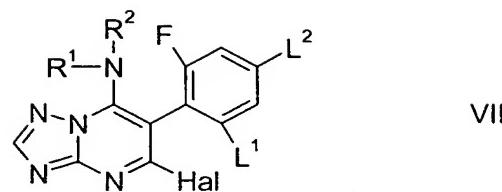
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11. A compound of the formulae IV and V:

5-methyl-6-(2-chloro-6-fluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidin-7-ol;
7-chloro-5-methyl-6-(2-chloro-6-fluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine;
15
7-bromo-5-methyl-6-(2-chloro-6-fluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine;
5-methyl-6-(2,6-difluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidin-7-ol;
7-chloro-5-methyl-6-(2,6-difluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine;
7-bromo-5-methyl-6-(2,6-difluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine;
5-methyl-6-(2,4,6-trifluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidin-7-ol;
20
7-chloro-5-methyl-6-(2,4,6-trifluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine;
7-bromo-5-methyl-6-(2,4,6-trifluorophenyl)-[1,2,4]triazolo[1,5-a]pyrimidine.

12. A process for preparing a compound of the formula I according to claim 1 by reacting a 5-halotriazolopyrimidine of the formula VII

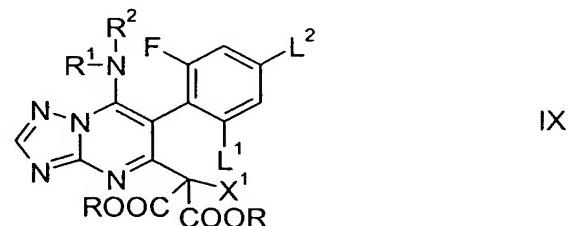
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with a malonate of the formula VIII,



in which X^1 is hydrogen or C_1-C_3 -alkyl and R is C_1-C_4 -alkyl, to give a compound of
5 the formula IX



which, after decarboxylation, gives the compound of the formula I.

- 13. A composition, comprising a solid or liquid carrier and a compound of the formula
10 I according to claim 1.
- 14. Seed, comprising a compound of the formula I according to claim 1 in an amount of from 1 to 1000 g/100 kg.
- 15. 15. A method for controlling phytopathogenic harmful fungi, which method comprises treating the fungi or the materials, plants, the soil or seed to be protected against fungal attack with an effective amount of a compound of the formula I according to claim 1.